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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/126,826	07/31/1998	SHUNPEI YAMAZAKI	07977/019002	9346

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EXAMINER

NGUYEN, DUNG T

ART UNIT PAPER NUMBER

2871

DATE MAILED: 07/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/126,826

Applicant(s)
Yamazaki et al.

Examiner
Dung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 15, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-48, 51-54, 70, and 72-104 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-48, 51-54, 70, and 72-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 23 6) ☐ Other:

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Response to Amendment

Applicant's amendment dated 04/15/2002 has been received and entered.

Applicant's arguments filed on 04/15/2002 have been considered but are moot in view of the new grounds of the following rejection.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 44-48, 51-54, 70 and newly added claims 72-83, 90-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mawatari et al., US Patent No. 5,200,847, in view of Yamazaki et al., US Patent 5,821,559.

Regarding claims 44-46, 48, 51-54, 70, 72-73, 75-79, 81-83, 90-91, 93-96, 93-96 and 98-99, Mawatari et al. disclose an active matrix LCD device (figures 3-4) having:

- a pair of opposed substrate (101, 102);
- a pixel circuit comprising a scanning line (104), a data line (105), a TFT (106) and pixel electrode (107) as claimed; each TFT comprising a channel region crystal silicon, a silicon oxide/polyimide passivation (according to TFT structure);
- a liquid crystal material (LC) disposed between the pair of opposed substrate;
- a driver circuit (120) comprising thin film transistors (TFTs) formed on a substrate (118) and adhered to the substrate (101) by a resin adhesive layer (125);

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- a passivation film covered TFT having a contact hole for electrical connection through a tapered configuration (according to active matrix LCD);

Although Mawatari et al. do not explicitly disclose that the driver TFT including a passivation film connected to the pixel TFT by a wiring, it would have been obvious to one skilled in the art to form a driver TFT having a passivation layer and a wiring to connect the pixel TFT from the driver TFT as shown by Yamazaki et al figure 4C in order to drive the pixel TFT in an LCD device.

Regarding claims 47, 74, 80, 92 and 97, although Mawatari et al. do not disclose the substrate can be formed by plastic, one of ordinary skill in the art would have realized the desire to form a substrate in an LCD device can be formed by plastic since it is a common practice in the LCD art. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form a plastic substrate in the Mawatari et al. LCD device in order to decrease the weight and reduce the cost of the LCD device.

3. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mawatari et al., US Patent No. 5,200,847, in view of Yamazaki et al., US Patent 5,821,559, further in view of Sawatsubashi et al., US Patent 5,148,301.

Regarding claim 48, Mawatari et al. neither discloses a second substrate covering the driver circuit nor a sealing member encloses the pixel circuit and the driver circuit. Sawatsubashi et al. do disclose an upper substrate can be covered/overlapped the driver circuit and seal it between two substrate as shown in figures 8 and 11. Therefore, it would have been obvious to

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one of ordinary skill in the art at the time of the invention to form a sealant between two substrate of an LCD device, so that it encloses a pixel circuit and a driver circuit, because it is a common practice in the art to protect the driver circuit from damage as well as to prevent the liquid crystal material from leaking out through such opening.

Double Patenting

4. Claims 44-48, 51-54, 70 and newly added claims 72-104 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5 and 17 of U.S. Patent No. 5,834,327, as stated in the final office action.

Applicant's request that a formal response to the Double Patenting rejection be held in abeyance until other rejections are resolved is acknowledged (see response dated 02/22/01).

Response to Arguments

It should also be noted that the limitation of claims 45, 70, 76 and 82 recites a one-step process which does not further limit the structure of the claimed reflector. Therefore, the process limitation does not have patentable weight.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dung Nguyen whose telephone number is (703) 305-0423. The fax phone number for this Group is (703) 746-7730.

DN
07/15/2002


William L. Sikes
Supervisory Patent Examiner
Group 2800